



European
Association
for Haemato-
Pathology

14th Meeting

Bordeaux, France
September 21-27
2008

ABSTRACT # 15

PRIMARY BONE MARROW LYMPHOMAS (PBML): CLINICAL PRESENTATION, HISTOPATHOLOGICAL FEATURES AND OUTCOME (IELSG #29)

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Background

PBML are rare and only few cases are reported in the literature.

Purpose of the study

To determine whether PBML may have specific clinico-pathological features and distinct outcome, we have retrospectively reviewed cases of PBML among eight European institutions.

Including criteria were:

- 1) isolated BM involvement
- 2) no evidence of extra-marrow dissemination on imaging studies
- 3) no evidence of splenic, liver or other organ infiltration
- 4) absence of localized bone tumours
- 5) exclusion of lymphomas primarily involving BM (SLL/CLL, LPL, MCL, SMZL, Burkitt and ALL).

Results

Seventeen cases fulfilled the inclusion criteria, and complete clinical data were available for 16 of them. The median age was 64 (29-91) years without sex predominance; B-symptoms were present in 69%, leukopenia in 31%, anemia in 46% and thrombocytopenia in 50%. Three cases (19%) had blood involvement. High serum LDH was observed in 79% cases. Twelve patients received CHOP-like or R-CHOP-like regimens; the complete response rate was 36%. Median overall survival (OS) was 1.8 years.

Platelet count $<100 \times 10^9/L$ and high serum LDH predicted poor OS.

Histologically, 12/17 cases had large B-cell lymphoma (6 nodular / 6 diffuse infiltration pattern). Among these, a germinal centre (GC) origin was demonstrated in 2 and excluded in 1, whereas 2 cases were T-cell rich B-NHL. The GC-associated features could not be assessed in 9 cases. The remaining 5 cases had histology consistent with FL (3) and PTCL (2). The 3 FL had paratrabecular infiltration, rearrangement of bcl-2 and 2 had peripheral blood involvement. The 2 PTCL showed an interstitial/diffuse infiltration pattern, bone marrow fibrosis, mild eosinophilia, and PD-1 expression consistent with a derivation from GC-T-cells.

Conclusion

PBML is a very uncommon extra-nodal lymphoma often associated with cytopenias, aggressive disease, poor outcome and heterogeneous histological features, some of them revealing a putative germinal centre origin.